

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: http://www.usda.gov

THE FACTS ABOUT TRACEABILITY

National Animal ID System

December 2007

Traceability is the key to protecting animal health and marketability. In order to respond quickly and effectively to an animal disease event (whether it is a single incident or a full-scale outbreak), animal health officials need to know which animals are involved, where they are located, and what other animals might have been exposed. The sooner reliable data is available, affected animals can be located, appropriate response measures can be established, and disease spread can be halted.

Retrieving animal location and movement data within a 48-hour window is optimal for efficient, effective disease containment. The current U.S. animal disease traceability infrastructure falls short of this 48-hour objective. The U.S. Department of Agriculture (USDA) is focusing on opportunities to bolster disease tracing capabilities by increasing the quantity and quality of animal identification data and the efficient use of evolving technology solutions.

The National Animal Identification System (NAIS), developed in partnership with State animal health authorities, industry and USDA, will facilitate progress towards improved traceability. NAIS is a state-of-the-art system that cuts across species and extends the benefits of animal identification and disease tracing beyond livestock participating in a particular disease program.

The Challenges of Traceability -

- 1) Participation in active disease programs has decreased as diseases have been eradicated.
 - This decrease is most apparent in the cattle industry.
 - In the past, when livestock diseases like brucellosis were widespread, cattle were commonly tested and vaccinated.

Recent Animal Disease Costs

Bovine Tuberculosis:

- Since 2002, detections in Arizona, California, Michigan, Minnesota, New Mexico and Texas have required the destruction of more than 25,000 cattle. A new detection in June in New Mexico will add to this total.
- USDA has spent approximately \$130 million on owner indemnification and control activities.
- Producers are financially affected by strict movement controls applied after new detections.
- Since 2004, USDA has tested 787,000 animals in response to TB outbreaks.

Exotic Newcastle Disease (2002):

- Confirmed in California and quickly spread to the neighboring states of Arizona, Nevada and Texas.
- Largest animal disease outbreak in the United States in 30 years. It took 10 months to eradicate the disease at a cost of \$180 million.
- Poultry producers, both commercial and backyard flock owners, lost 4 million birds during extensive depopulation activities.

Bovine Spongiform Encephalopathy (2003):

- USDA spent \$5 million on its epidemiology investigation, depopulation and initial response.
- The United States lost 80 percent of its foreign beef trade.
- As part of the effort to regain access to foreign markets, USDA spent approximately \$189 million on the enhanced BSE surveillance program.

• The process included officially identifying those animals and recording their information in a State and Federal animal health systems, creating a high level of traceability for the

cattle industry.

• Today, however, less than 12% of our cattle population is vaccinated for brucellosis.

2) Information that is maintained by many sources must be accessed quickly.

- States, industry, and USDA maintain separate animal identification information systems.
- Current animal identification and data collection approaches typically address individual
 objectives, such as specific disease eradication programs, interstate commerce, breed
 registries and age and source verification.
- An animal can be identified multiple times yet still not be fully traceable in a disease event because separate programs use distinct herd and flock identification protocols.

3) Animal disease traceability varies by species.

- The availability of unique individual animal identification data that results from management, transportation, and marketing practices varies within each species sector.
- The level of vertical integration within an industry sector directly affects that industry's ability to conduct timely and efficient disease tracebacks.

Traceability - The Way Forward

USDA is releasing "A Business Plan to Advance Animal Disease Traceability," which details recommended strategies and actions aimed to harmonize existing State/Federal regulated and voluntary animal health programs, industry-administered animal health and marketing programs, and various animal identification techniques. Specifically, this plan recognizes the following as key for achieving progress towards a comprehensive traceability infrastructure:

- 1) Prioritize species and sectors to ensure resources are applied where traceability advances are needed most.
 - Priority species (and sectors within species) to include all major food animals cattle, swine, poultry, sheep, and goats, along with select equine sectors. Emphasis is placed on animals that move within commerce and that are commingled with animals from other premises, not on movements within premises or for local events.
- 2) Harmonize government and industry animal identification programs by creating compatible processes and applying common data standards.
 - Separate systems maintained by States, industry and USDA will be able to "speak" to each other when essential animal location and movement information is needed to respond to a disease outbreak.
 - This approach conserves time, money, and effort by drawing from systems and data already in place.
 - The approach also maintains the flexibility required by individual States, industry associations, and other entities to use animal identification for multiple purposes.
- 3) Standardize Data Elements of Disease Programs to Ensure Compatibility.

- By standardizing data elements in existing disease programs, USDA will greatly enhance disease tracing and emergency response capabilities.
- 4) Integrate automated data capture technology with animal disease programs.
 - By using NAIS-compliant identification devices that support automated data capture and integrating handheld computers/readers to replace paper-based forms, animal health officials will increase the volume and quality of the data, minimize errors and speed data entry into searchable databases.
- 5) Partner with States, Tribes, and Territories to facilitate the development of each State's animal disease traceability infrastructure.
 - State animal health officials will administer localized plans reflecting animal health priorities in their region.
- 6) Collaborate with industry organizations and animal health officials to accelerate the adoption of practices that will advance traceability.
 - In partnership with USDA, non-profit industry organizations will promote premises registration within various species groups.
 - Accredited veterinarians, in collaboration with USDA, will adopt NAIS data standards in everyday animal health management and disease program activities at the producer level.
- 7) Establish performance standards for ID devices and evaluate emerging technology with emphasis on systems that can operate at the "speed of commerce."

USDA's Commitment-

USDA is committed to improving and increasing the United States' national animal disease tracing capabilities. Based upon recent animal disease detections, both here and abroad, it is clear that USDA must be able to respond as quickly as possible to contain diseases and minimize losses. By building a practical, flexible, modern animal identification and disease tracing system, USDA will ensure that U.S. livestock remains the healthiest in the world.